UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,256	08/18/2003	Stephen Paul Zadesky	APL1P284/P3111 4668	
67673 APPLE c/o MO	7590 03/23/2007 FO NOVA		EXAM	INER
1650 TYSONS BLVD. SUITE 300 MCLEAN, VA 22102			NGUYEN, JIMMY H	
			ART UNIT	PAPER NUMBER
			2629	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)	
Office Action Summary		10/643,256	ZADESKY ET AL.	
		Examiner	Art Unit	
	·	Jimmy H. Nguyen	2629	
Period fe	The MAILING DATE of this communication apports or Reply	pears on the cover sheet with the	correspondence address	
A SH WHIO - Exte after - If NO - Fails Any	HORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE on the may be available under the provisions of 37 CFR 1.13 or SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period we ure to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing med patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tire will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).	
Status				
· 1)🛛	Responsive to communication(s) filed on 31 Ja	anuary 2007	•	
2a)⊠	•	action is non-final.		
3)	,			
- , 🗀	closed in accordance with the practice under E	•		
Disposit	tion of Claims			
	Claim(s) 1-31 and 46-66 is/are pending in the a	application		
7/63	4a) Of the above claim(s) <u>1-31</u> is/are withdrawn			
5)	Claim(s) is/are allowed.			
	Claim(s) <u>46-66</u> is/are rejected.			
·	Claim(s) is/are objected to.			
8)	Claim(s) are subject to restriction and/or	r election requirement.		
Applicat	tion Papers		;	
	The specification is objected to by the Examine	.r		
	The drawing(s) filed on is/are: a) acce		Examiner	
. • / 🗀	Applicant may not request that any objection to the			
	Replacement drawing sheet(s) including the correct		• •	
11)	The oath or declaration is objected to by the Ex		•	
Priority (under 35 U.S.C. § 119	•	•	
	Acknowledgment is made of a claim for foreign ☐ All b)☐ Some * c)☐ None of:	priority under 35 U.S.C. § 119(a)-(d) or (f).	
۵)	1. Certified copies of the priority documents	s have been received.		
	2. Certified copies of the priority documents		ion No	
	3. Copies of the certified copies of the prior	_	•	
	application from the International Bureau	u (PCT Rule 17.2(a)).		
* (See the attached detailed Office action for a list	of the certified copies not receive	∍d.	
Attachmer	nt(s)			
· —	ce of References Cited (PTO-892)	4) Interview Summary	•	
	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Date of Informal F		
	er No(s)/Mail Date	6) Other:	C.S. (Aphocao)	

Application/Control Number: 10/643,256 Page 2

Art Unit: 2629

DETAILED ACTION

1. This Office Action is made in response to applicant's amendment filed on 01/31/2007. Claims 1-31 and 46-66 are currently pending in the application. Claims 1-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group I. Claims 46-66 are considered as follows:

Notice To Applicants

- 2. This application contains claims 1-31 drawn to an invention nonelected with traverse in Paper filed on 06/16/2006. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.
- 3. Further, since Applicants have filed on 11/06/2006 a divisional application having a serial number "11/592679" and including claims 1-31, which are identical to claims 1-31 of this application, Examiner suggests the Applicants to cancel claim 1-31 of this application, in order to avoid the rejection under 35 USC 101 to this application and the application "11/592679".

Claim Objections

4. Claim 52 is objected to under 37 CFR 1.75(a) because although this claim meets the requirement 112/2d, i.e., the metes and bounds are determinable, however, -- a selection for -- should be inserted immediately after "comprises" in line 1, in order to clarify the claimed invention.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 48-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 48 recites the limitation "the rotational input device" in line 3. There is insufficient antecedent basis for this limitation in the claim.

As to claim 49, since this claim depends upon claim 48, this claim is therefore rejected for the same reason set forth in claim 48 above.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 46-49, 52-57, 60-62, 32-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Molne (US 6,243,080 B1, cited in IDS filed on 09/26/2006).

As to claims 46-49, 52, 54-57, 61, 62, and 66, Molne discloses a portable media player (a wireless communication device 10, see Fig. 1, col. 7, lines 30-34) comprising a housing (see Fig. 1) including a frame (a casing 17, see Fig. 1 or 2); and a touchpad/rotational input device (a touch sensitive panel 30, see Figs. 2-5) disposed within the housing (see Figs. 1 and 3) and capable of a gimbal action relative to the housing, wherein the gimbal action of the user input apparatus enables a user of the portable media player to make media selections and enables the touch panel to pivot relative to the frame(17) and the housing (see Figs. 2-5 and the corresponding description, specifically col. 6, lines 31-45). Molne further teaches a touchpad

(30) configured to receive a rotational input from a user's finger by virtue of the description at col. 3, lines 16-32.

Further regarding to the claimed limitations, "the touchpad/rotational input device comprises a plurality of spatially distinct zones, each of the zones having a corresponding indicator for generating a distinct user input signal when the touchpad/rotational input device is depressed in the region of the zone", Molne discloses at col. 6, lines 31-46 that the touch-sensitive panel 30 (i.e., the claimed rigid user interface platform) including a portion corresponding to the keypad, so that each key of the keypad corresponding to an input zone having a corresponding one of the movements indicator for generating a distinct user input signal when the touch-sensitive panel 30 (i.e., the claimed rigid user interface platform) is moved in the region of the input zone. Based on the mentioned passage, Molne implicitly discloses the above underlined limitations.

Accordingly, all the limitations of these claims are read in the Molne reference.

As to claims 53, 60, and 65, Molne discloses an input surface of the touchpad/rotational input device substantially co-planer with an external surface of the housing (see Fig. 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all 9. obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 10/643,256

Art Unit: 2629

10. Claims 50, 51, 58, 59, 63, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molne as applied to claims 46, 54, and 61, and further in view of Trent, JR. et al. (US 2004/0252109 A1), hereinafter Trent.

As to these claims, Molne as discussed in the rejection of independent claims 46, 54, and 61 above, Molne discloses all the claimed limitations of these claims except that Molne does not teach that the touchpad is based on a polar coordinate system as presently recited in claims 50, 58 and 63 and the touchpad is circular as presently recited in claims 51, 59, and 64.

However, Trent discloses a circular touchpad (a touch sensor, e.g., see Fig. 3, 37, or 38) based on a polar coordinate system (see paragraph [0090]). Trent further teaches that the benefit of using the circular touchpad (the touch sensor) based on the polar coordinate system is to provide a user a number of functions associated with a particular application (see Fig. 38; paragraph [0137]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to replace the Molne rectangular touchpad with a circular touchpad based on a polar coordinate system, in view of the teaching in the Trent reference, because this would provide a user a number of functions associated with a particular application of the Molne device, as taught by the Trent reference (see Fig. 38; paragraph [0137]).

11. Claims 50-52, 58, 59, 63, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molne and further in view of Matzke et al. (US 4,736,191), hereinafter Matzke.

As to these claims, Molne as discussed in the rejection of independent claims 46, 54, and 61 above, Molne discloses all the claimed limitations of these claims except that Molne does not

Application/Control Number: 10/643,256

Art Unit: 2629

teach that the touchpad is based on a polar coordinate system as presently recited in claims 50, 58 and 63 and the touchpad is circular as presently recited in claims 51, 59, and 64.

However, Matzke discloses a circular touchpad (a touch pad 14, see Fig. 1) based on a polar coordinate system (see col. 8, lines 22-27). Matzke further teaches that the benefit of using the circular touchpad (the touch sensor) based on the polar coordinate system is to provide a user capable of commanding movement of the cursor in essentially any angular direction rather than being limited to translation of the cursor in only certain angular directions (see col. 3, lines 26-31). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to replace the Molne rectangular touchpad with a circular touchpad based on a polar coordinate system, in view of the teaching in the Matzke reference, because this would provide a user capable of commanding movement of the cursor in essentially any angular direction rather than being limited to translation of the cursor in only certain angular directions, as taught by the Matzke reference (see col. 3, lines 26-31).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 46-66 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 6, 7, 11, and 16 of U.S. Patent No. 7,046,230 B2, hereinafter Patent230 in view of Molne.

Claims 1, 6, 7, 11 and 16 of Patent230 are directed to a portable media player comprising all limitations of the pending claims 46-66 except for the limitations, "a touchpad/rotational input device capable of a gimbal action relative to the housing, wherein the gimbal action of the user input apparatus enables a user of the portable media player to make media selections and enables the touch panel to pivot relative to the frame and the housing; and the touchpad/rotational input device comprising a plurality of spatially distinct zones, each of the zones having a corresponding indicator for generating a distinct user input signal when the touchpad/rotational input device is depressed in the region of the zone", as presently claimed. However, Molne expressly teaches the above underlined limitations, see the rejection to claims 46-49, 52, 54-57, 61, 62, and 66. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the touchpad of the device of claims 1, 6, 7, 11 and 16 of Patent230, in view of the teaching in the Molne reference, because this would provide a user a touchpad with selector, thereby allowing the user to select and to normally operate the touchpad without removing the finger from the touchpad, as taught by Molne (see col. 2, lines 5-44).

Response to Arguments

14. It is noted Applicants that the objections and rejections in the previous Office action dated 10/27/2006 have been rendered moot in light of cancellation to claims 32-45.

Conclusion

Application/Control Number: 10/643,256

Art Unit: 2629

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is 571-272-7675. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JHN March 21, 2007 Jimmy H. Nguyen Primary Examiner

Technology Division: 2629.